Application No. 10/814,658

Filed: March 31, 2004

TC Art Unit: 3765

Confirmation No.: 5982

REMARKS

Claims 1, 2, 22-29, 31, 33, 35-37, and 40-43 have been rejected under 35 U.S.C. § 103(a) over Lovgren et al. (US Pat. No. 4,475,271) in view of Brabant et al. (US Pat. No 5,584,101). Lovgren corresponds to European Patent EP 0 093 585 mentioned in the specification of the present application (page 1, line 19). Reconsideration of this rejection is respectfully requested.

As noted by the Examiner, Lovgren does not disclose that the vacuum means provides a reduction in vacuum speed between the upstream and downstream parts of the vacuum zone. Brabant is relied upon to supply this teaching.

Brabant, however, is not concerned with the making of a non-woven material by aerological means. The suction box 6 under the conveying surface is not used to collect and form a fiber sheet but rather to remove an already formed fiber web 2 from a takeoff cylinder 4. Thus, one of skill in the art would not use the suction box 6 of Brabant with the device of Lovgren.

Additionally, in Lovgren, the vacuum speed corresponds exactly to the conveying surface zone located under the dispersion chamber. In contrast, in the present invention, the vacuum zone stretches not only under the dispersion chamber but also downstream from the dispersion chamber. Brabant cannot overcome this deficiency, because Brabant does not disclose, teach or suggest this feature. In Brabant, there is no dispersion chamber; the vacuum zone is located under the take off cylinder.

Furthermore, Brabant, at col. 7, lines 38-54, discloses a vacuum speed that increases from the upstream of the vacuum zone to a suction slot 12 and then decreases from the slot 12 toward

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the downstream of the vacuum zone. This is different from "a reduction in vacuum speed between the upstream and downstream parts of said zone" as recited in claim 1. The spot marked by the Examiner "upstream" on the Brabant figure reproduced in the office action is actually the midpoint of the suction box; this spot cannot reasonably be considered "the upstream part" as recited in claim 1. In Brabant, the vacuum speed at the upstream of the vacuum zone is the same as the vacuum speed downstream, which is more or less zero. In contrast, in the present invention, it is at the upstream part of the vacuum zone where the highest vacuum speed is found.

Accordingly, claim 1 and the claims dependent therefrom are believed to be patentable over Lovgren in view of Brabant.

Applicant thanks the Examiner for the indication of allowable subject matter in claims 30, 32, 34, 38 and 39. These claims are also believed to be allowable for the reasons set forth above with respect to claim 1.

Claims 1, 2, 22, 27, 33, 35, 37, and 40-43 have been objected to because of various informalities. Claims 1, 2, 33, 37, and 40-42 have been amended to address the matters noted by the Examiner. The specification has been amended to provide support for claim 22. Support for claims 27 and 37 can be found in the paragraph on page 4, line 29, to page 5, line 7, of the specification (in the Supplemental Preliminary Amendment filed on October 7, 2004). Support for claim 35 can be found in the paragraph on page 9, after line 30 (in the Supplemental Preliminary Amendment filed on October 7, 2004).

The drawings have been objected to regarding various reference characters. The character "N" has been deleted from the

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specification and claims. The numerals 20 and 21 are found in the paragraph on page 9, after line 30 (in the Supplemental Preliminary Amendment filed on October 7, 2004). The characters α and S have been deleted from Fig. 5.

The specification has been corrected as requested by the Examiner.

Claim 2 has been further amended for clarity and consistency with claim 1.

In view of the above amendments and remarks, all claims are believed to be in condition for allowance, and reconsideration and indication thereof are respectfully requested. The Examiner is encouraged to telephone the undersigned attorney to discuss any matter that would expedite allowance of the present application.

Respectfully submitted,

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BEH/dkh/323086

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THE DRAWINGS

Fig. 5 has been amended to delete reference characters α and S, in response to the Examiner's objections to the drawing.